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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/827,402

04/20/2004

Koichiro Tanaka

0756-7295

2936

31780 7590 02/29/2008

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EXAMINER

SMITH, BRADLEY

ART UNIT

PAPER NUMBER

2891

MAIL DATE

DELIVERY MODE

02/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/827,402	TANAKA, KOICHIRO	
	Examiner	Art Unit	
	Bradley K. Smith	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/0907</u> . | 6) <input checked="" type="checkbox"/> Other: <u>east search</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24, 26 and 33 are rejected under 35 U.S.C. 103(a) as being obvious over Azami et al. (US 2005/0245007) in view of Yamazaki et al. (US 6,700,096). Azami disclose forming a semiconductor film by irradiating an energy beam continuously while scanning the energy beam, forming a gate electrode and forming an impurity region using the gate electrode as a mask (figures 19 -25) the energy beam is scanned by a mirror (702/802) and the device is used in display device [0003] and the energy beam changing directions (see figure 18c). Azami fails to disclose blocking the beam in a direction in which the scanning direction changes. However Yamazaki et al. disclose using a shutter to block the energy beam (column 15 lines 15-25). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Azami and Yamazaki et al. because the shutter (of Yamazaki column 15 lines 15-25) would keep the light from damaging the semiconductor substrate (Azami,1400, figure 18c).

Claims 25 –38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US 6,506,635) in view of Yamazaki (US 6,700,096). Yamazaki et al. disclose forming a

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crystalline semiconductor film by irradiating an energy beam output continuously while scanning the energy beam with an apparatus has a specular body which is fixed to a shaft and the specular body vibrates by using the shaft at its center ; forming a gate electrode over the crystalline semiconductor film; and forming an impurity region in the crystalline semiconductor film using the gate electrode as a mask (figure 4) and using a argon laser (see figure 6, element 605).

Regarding claims 39-43, Yamazaki et al. (US 6,506,635) disclose a galvanometer mirror is used for the scanning (see figure 6, element 607). Yamazaki (US 6,506,635) fails to disclose blocking the beam in a direction in which the scanning direction changes. However Yamazaki et al. (US 6,700,096) disclose using a shutter to block the energy beam (column 15 lines 15-25).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yamazaki (US 6,506,635) and Yamazaki et al. (6,700,096) because the shutter (of 6,700,096) would keep the light from damaging the semiconductor substrate (of 6,506635).

Response to Arguments

Applicant's arguments filed 11/09/07 have been fully considered but they are not persuasive.

The applicant's representative contends that "the position blocked by the shutter is not a position in which a scanning direction of the energy beam changes but a predetermined portion." The applicant's representative offers no evidence of this contention that the where the energy beam changes direction is not a predetermined portion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley K. Smith whose telephone number is 571-272-1884. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley K Smith/
Primary Examiner, Art Unit 2891